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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/666,630	09/20/2000	Kaushal Kurapati	US000240	5682

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EXAMINER

MA, JOHNNY

ART UNIT PAPER NUMBER

2617

DATE MAILED: 03/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/666,630	Applicant(s) KURAPATI, KAUSHAL	
	Examiner Johnny Ma	Art Unit 2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 December 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7, 9-12, 14-22, 24-27 and 29-32 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7, 9-12, 14-22, 24-27 and 29-32 is/are rejected.
- 7) ☒ Claim(s) 8, 13, 23 and 28 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Please note, this is a new Final Office Action in view of the amendments to the claims filed 4/26/2005.

Response to Arguments

1. Applicant's arguments, with respect to claims 1-7, 9-12, 14-22, 24-27, and 29-32 have been considered but are moot in view of the new ground(s) of rejection. Upon further consideration, the rejections of claims 8, 13, 23, and 28 have been withdrawn and are currently objected to as being dependent upon a rejected base claims.

Regarding “establishing at least two viewing history sub-sets, VH1 and VHk, from said viewing history. The examiner first notes that “subset” is defined as “[a] set contained within a set” (see the American Heritage Dictionary of the English Language, Fourth Edition). The Bedard reference discloses two viewing history sub-sets. As discussed in the previous Office Action, the Bedard reference discloses “at least two viewing history sub-sets,” recent selections (viewing history subset 1) and old selections (viewing history subset 2) (Bedard 6:33-63). The recent selections and old selections are part of a “set” of programs watched, a viewing history, thus the old selections and recent selections are both “subsets” of the viewing history, a set of recent or old selections contained within a set of viewed programming (viewing history set). Specifically, the Bedard reference discloses a new entry 202, a second subset of the viewing history, with the viewer profile array 200, a first subset of the viewing history (Bedard 6:47-62).

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-7, 9-12, 14-22, 24-27, and 29-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bedard (US 5,801,747 of record) in further view of Herz et al. (US 6,088,722).

As to claims 1, 3, 16, 18, and 31, note the Bedard reference teaches a system and method for monitoring viewing history to determine programs to recommend to viewers. The claimed apparatus, method, and article of manufacture “for identifying changes in television viewing preferences of an individual” are met by Bedard with reference to Figures 2 and 3 and corresponding methods described in detail below (see also Bedard 3:32-55). Bedard teaches computer executable instructions configured in memory to be executed by a processor for “obtaining a viewer history indicating a set of programs that have been watched by a user” as seen by the flowchart of Fig. 3 and taught in column 5, lines 6+, by tracking which channels are watched. A plurality of choices (Figs. 1,2) with respective records combine to form a user selection history. The overall selection history is established into “at least two viewing history sub-sets,” by comparing recent selections (subset 2) to old selections (subset 1) to determine if the profile should be updated using weighted techniques (Bedard 6:33-63). These selection histories are generated “profiles” in that they contain viewer record selections for the corresponding history period. The “profiles” are then updated by comparing the viewing units in order to “identify a change in user preferences” as illustrated by comparison step for adding new entries (Bedard 6:35-62) wherein the new entry is identified such that a comparison is inherent to the determination of whether an entry is new or preexisting. The claimed generating a corresponding set of program recommendation scores, S_1 and S_k , for a set of programs based on

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said at least two viewing history sub-sets, VH1 and VHk is met by ranking by relevance based on the amount of time the corresponding channels have been viewed during the viewer profile collection period (Bedard 6:35-46) wherein the “EPG of FIG. 5 can operate in conjunction with the viewer profile of the present invention to organize the individual channels in row 502 by viewer preference” (Bedard 7:39-41) “so as to provide faster access to information concerning the viewer’s preferred channels and/or programming categories” (Bedard 7:19-27). Note the Bedard reference discloses tracking user preferences for channels (Bedard 6:23-27). However, the Bedard reference is silent as to recommending programs in a given time interval and fails to specifically disclose the tracking of specific programs rather than tracking channels.

Now note the Herz et al. reference that discloses a system and method for maintaining customer profiles for each customer. The claimed “programs in a given time interval” is met by where the plurality of customer profiles are representative of the customer’s changing preferences for the predetermined characteristics in accordance with time of the day and of the week, thereby reflecting changes in the customer’s preferences or ‘moods’ during the course of the week (Herz 5:30-35).). The Herz et al. reference further discloses tracking user preferences by specific programming watched by the user (Herz 6:64-67). Therefore, the examiner submits that it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Bedard user viewing history recommendations with the Herz et al. tracking user preferences for specific time periods and by particular programs for the purpose of providing user recommendations that are more closely tailored to a users typical viewing habits/moods at a given time.

As to claims 11, 26 and 32, similar limitations are recited in claims 1, 16, and 31 with the additional limitation of deleting “a portion of said viewing history if said sets of program recommendation scores...are substantially similar.” This limitation is met by comparing current and past selection histories and updating the records by maintaining a list of the most relevant past selections. Specifically, old entries may be replaced as taught in col. 5:59-60 or updated if they are similar but have different viewing units as taught in col. 5:44-48.

As to claims 2, 12, 17, and 27, the claimed comparing “the top-N (where N is a positive integer) recommended television programs in each set” is met by comparing the entries as taught in col. 6:35-39.

As to claims 4 and 19, the claimed “presenting a user with a set of recommended programs based on one or both of said sets of programs” is met by using the methods above and displaying a list of recommended programs as seen in Fig. 4 and taught in col. 7:14-28).

As to claims 5 and 20, the claimed “presenting a user with a union set of recommended programs based on said sets of programs” is taught by Bedard through building initial profile. While a profile is being built all entries, old and new will be saved while there is space as taught in col. 5:49-58. By keeping both old and new data, a union is formed.

As to claim 6 and 21, the claimed “presenting a user with an intersections set of recommended programs based said set of programs” is not specifically taught by Bedard. Examiner takes Official Notice that the creation of an intersection of sets of data is notoriously well known in the art. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system and methods of Bedard by presenting users with a

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union of the two history sets in order to provide users with a list of elements that are in both the first and second sets.

As to claims 7 and 22, Bedard teaches giving weight to recently viewed programs (Bedard 6:44-46) and presenting users with a subset of recommendations (Bedard 8:24-30), but not explicitly “displaying recommended programs based on a more recent sub-set of said viewing history.” Nevertheless the examiner gives Official Notice that it is notoriously well known in the art of providing recommendations to weight current values more heavily than older values for the purpose of providing recommendations that are more suited to a user’s current interests. Therefore, the examiner submits that it would have been obvious for one of ordinary skill in the art at the time the invention was made to modify the Bedard display of recommendations accordingly for the above stated advantages.

As to claims 9-10, 14-15, 24-25, and 29-30, the claimed selection of the two histories from “a time span that is less than the entire time period covered by the viewing history” is met by selecting from a user selection history over a period of recent viewing as taught in col. 5:34-41. These entries are compared to older entries to determine which should be removed in the case a profile is full (col. 5:19-27). The selected time span is a “similar” time period to a given time period in that they are both time periods with a duration.

Allowable Subject Matter

4. Claims 8, 13, 23, and 28 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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5. The following is a statement of reasons for the indication of allowable subject matter: the prior art, alone, or in combination fail to teach or fairly suggest “establishing at least two viewing history sub-sets, VH1 and VHk, from said viewing history wherein said at least two viewing history sub-sets, VH1 and VHk, from said viewing history are obtained by uniformly randomly sampling subsets of television programs from said viewing history.”

Conclusion

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Johnny Ma whose telephone number is (571) 272-7351. The examiner can normally be reached on 8:00 am - 5:00 pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Kelley can be reached on (571) 272-7331. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

jm


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